



SEQUENCE LISTING

<110> Brunkow, Mary E.
 Jeffery, Eric W.
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 Ramsdell, Fred

<120> IDENTIFICATION OF THE GENE CAUSING THE
 MOUSE SCURFY PHENOTYPE AND ITS HUMAN ORTHOLOG

<130> 240083.501D6

<140> US 09/696,867
 <141> 2000-10-25

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| caccagtaca gctggaaaca cccagccact ccagctcccg | gcaacttctc ctgactctgc | 180 |
| cttcagacga gacttggaaag acagtcaat ctcagcagct | cctctgcgt tatccagct | 240 |
| gcctctgaca agaacccaat gcccaacccct aggccagcca | agcctatggc tccttccttg | 300 |
| gcccttggcc catccccagg agtcttgcga agcttggaa | ctgcacccaa gggctcagaa | 360 |
| cttctaggga ccaggggctc tgggggaccc ttccaaagg | gggacctgct aagtggggcc | 420 |
| cacaccttctt cttecttgaa ccccttgcca ccatccccag | tgcagctgctc tacagtgc | 480 |
| ctagtcatgg tggcaccgtc tggggcccgta cttagtccct | cacccacccctt acaggccctt | 540 |
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| cctgtgtcc aagtgcgtcc actggacaac ccagccatga | tcagcctccc accaccttct | 660 |
| gctgccactg gggcttctc cctcaaggcc cggcctggcc | tgccacctgg gatcaatgt | 720 |
| gccagtcgg aatgggtgtc cagggagcca gtcctactct | gcaccttccc acgtctgggt | 780 |
| acacccagga aagacagcaa ctttttggct gcaccccaag | gatcctaccc actgctggca | 840 |
| aatggagtct gcaagtggcc tggttgtgag aaggcttctg | aggagccaga agagtttctc | 900 |
| aaggactgccc aaggagatca tctccctggat gagaaaggca | aggcccagtg cctccctccag | 960 |
| agagaagtgg tgcagtctct ggagcagcag ctggagctgg | aaaaggagaa gctggagat | 1020 |
| atgcagggccc acctggctgg gaagatggcg ctggccaagg | ctccatctgt ggcctcaatg | 1080 |
| gacaagagct ctgtgtcat cgtagccacc agtactcagg | gcagtgtgtc cccggcttgg | 1140 |
| tctgtcttc gggaggtctc agacggccgc ctgtttgcag | tgccggagga cctctgggaa | 1200 |
| agccatggca atagttctt cccagatgtc ttccacaaca | tggactactt caagtaccac | 1260 |
| aatatgcac cccctttcac ctatgccacc cttatccgt | gggcacatctt ggaagccccg | 1320 |
| gagaggcaga ggacactcaa tggaaatctac cattggttt | ctcgcatgtt cgcctacttc | 1380 |
| agaaaaccacc cccgcacactg gaagaatgcc atccggccaca | acctgagctt gcacaagtgc | 1440 |
| tttgtgcgag tggagagcga gaaggagca gtgtggaccg | tagatgaatt tgagtttgc | 1500 |
| aagaagagga cccaaacccc caacaagtgc tccaaatccc | ccctttgacc taaaacccaa | 1560 |
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| | | | | | | |
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| tccctatcta | gctgccctcc | tagatcatat | catctgcctt | acagctgaga | ggggtgccaa | 1740 |
| tcccagccta | gcccctagtt | ccaacctagc | cccaagatga | actttccagt | caaagagccc | 1800 |
| tcacaaccag | ctatacatat | ctgccttggc | cactgccaag | cagaaagatg | acagacacca | 1860 |
| tcctaattatt | tactcaaccc | aaaccctaaa | acatgaagag | cctgccttgg | tacattcgtg | 1920 |
| aacttcaaaa | gttagtcatg | cagtcacaca | tgactgcagt | cctactgact | cacaccccaa | 1980 |
| agcactcacc | cacaacatct | ggaaccacgg | gcactatcac | acatagggt | atatacagac | 2040 |
| ccttacacag | caacagcact | ggaaccttca | caattacatc | cccccaaacc | acacaggcat | 2100 |
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| Ser | Glu | Leu | Leu | Gly | Thr | Arg | Gly | Ser | Gly | Gly | Pro | Phe | Gln | Gly | Arg |
| | | | | | | 35 | | | 40 | | | | | 45 | |
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| Gln | Thr | Pro | Val | Leu | Gln | Val | Arg | Pro | Leu | Asp | Asn | Pro | Ala | Met | Ile |
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| Leu | Ala | Asn | Gly | Val | Cys | Lys | Trp | Pro | Gly | Cys | Glu | Lys | Val | Phe | Glu |
| | | | | | | 195 | | | | 200 | | | | 205 | |
| Glu | Pro | Glu | Glu | Phe | Leu | Lys | His | Cys | Gln | Ala | Asp | His | Leu | Leu | Asp |
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| Glu | Lys | Gly | Lys | Ala | Gln | Cys | Leu | Leu | Gln | Arg | Glu | Val | Val | Gln | Ser |
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| Leu | Glu | Gln | Gln | Leu | Glu | Leu | Glu | Lys | Glu | Lys | Leu | Gly | Ala | Met | Gln |
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| Ala | His | Leu | Ala | Gly | Lys | Met | Ala | Leu | Ala | Lys | Ala | Pro | Ser | Vai | Ala |
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| Ser | Met | Asp | Lys | Ser | Ser | Cys | Cys | Ile | Val | Ala | Thr | Ser | Thr | Gln | Gly |
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| Ser | Val | Leu | Pro | Ala | Trp | Ser | Ala | Pro | Arg | Glu | Ala | Pro | Asp | Gly | Gly |
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| Leu | Phe | Ala | Val | Arg | Arg | His | Leu | Trp | Gly | Ser | His | Gly | Asn | Ser | Ser |
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Arg Pro Pro Phe Thr Tyr Ala Thr Leu Ile Arg Trp Ala Ile Leu Glu
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 Ala Pro Glu Arg Gln Arg Thr Leu Asn Glu Ile Tyr His Trp Phe Thr
 355 360 365
 Arg Met Phe Ala Tyr Phe Arg Asn His Pro Ala Thr Trp Lys Asn Ala
 370 375 380
 Ile Arg His Asn Leu Ser Leu His Lys Cys Phe Val Arg Val Glu Ser
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| cgtacagcgt ggttttctt | ctcggtataa aagcaaagtt | gtttttgata | cgtgacagtt | 120 |
| tcccaacaagc caggctgatc | cttttctgtc agtccacttc | accaagctg | cccttggaca | 180 |
| aggaccgcgt gcccaacccc | aggcctggca agccctcgcc | cccttccttg | gccttggcc | 240 |
| catccccagg agcctcgccc | agctggaggg ctgcacccaa | agcctcagac | ctgctggggg | 300 |
| cccgggggccc agggggaaacc | ttccaggggcc gagatcttcg | agggggggcc | catgcctct | 360 |
| cttcttcctt gaaccccatg | ccaccatcgc agtgcagct | gcccacactg | cccttagtca | 420 |
| tgggtggcacc ctccggggca | cggctggggcc ctttgcctca | tttacaggca | ctcttcagg | 480 |
| acaggccaca tttcatgcac | cagctctcaa cggtggatgc | ccacgcccgg | accctgtgc | 540 |
| tgcaggtgca ccccttggag | agcccagcca tgatcagct | cacaccaccc | accacccgcca | 600 |
| ctggggtctt ctccctcaag | gccccggctg gcctccacc | ttggatcaac | gtggccagecc | 660 |
| tggaatgggt gtccaggggag | ccggcactgc tctgcacctt | cccaaattccc | agtgcaccca | 720 |
| ggaaggacag caccctttcg | gctgtgcccc agactctta | cccaactgctg | gcaaatggtg | 780 |
| tctgcaagtg gcccggatgt | gagaaggctt tcgaagagcc | agaggacttc | ctcaagcact | 840 |
| gccaggccgga ccatcttctg | gatgagaagg gcagggcaca | atgtctctc | cagagagaga | 900 |
| tggtacagtc tctggagcag | cagctggtgc tggagaagga | gaagctgagt | gccccccgg | 960 |
| cccacctggc tggggaaaatg | gcactgacca agggttcata | tgtggcatca | tcggacaagg | 1020 |
| gctcctgctg catcgtagct | gctggcagcc aaggccctgt | cgtcccagcc | tggctggcc | 1080 |
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| cccctttcac ctacgcccacg | ctcatccgt gggccatct | ggaggctcca | gagaagcagc | 1260 |
| ggacactcaa tgagatctac | cactggttca cacgcatgtt | tgccttcttc | agaaaccatc | 1320 |
| ctgccacctg gaagaacgcc | atccgcccaca acctgagtt | gcacaagtgc | tttgcgggg | 1380 |
| tggagagcga gaagggggct | gtgtggaccg tggatgagct | ggagttccgc | aagaaacggg | 1440 |
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| tgctcagagg ggccccggtc | ctggcccccaag cccccaccc | cgccccagac | acacccccc | 1740 |
| gtcgagccct gcagccaaac | agagccctca caaccagcca | cacagagct | gccttagct | 1800 |
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 35 40 45
 Asp Leu Arg Gly Gly Ala His Ala Ser Ser Ser Leu Asn Pro Met
 50 55 60
 Pro Pro Ser Gln Leu Gln Leu Pro Thr Leu Pro Leu Val Met Val Ala
 65 70 75 80
 Pro Ser Gly Ala Arg Leu Gly Pro Leu Pro His Leu Gln Ala Leu Leu
 85 90 95
 Gln Asp Arg Pro His Phe Met His Gln Leu Ser Thr Val Asp Ala His
 100 105 110
 Ala Arg Thr Pro Val Leu Gln Val His Pro Leu Glu Ser Pro Ala Met
 115 120 125
 Ile Ser Leu Thr Pro Pro Thr Thr Ala Thr Gly Val Phe Ser Leu Lys
 130 135 140
 Ala Arg Pro Gly Leu Pro Pro Gly Ile Asn Val Ala Ser Leu Glu Trp
 145 150 155 160
 Val Ser Arg Glu Pro Ala Leu Leu Cys Thr Phe Pro Asn Pro Ser Ala
 165 170 175
 Pro Arg Lys Asp Ser Thr Leu Ser Ala Val Pro Gln Ser Ser Tyr Pro
 180 185 190
 Leu Leu Ala Asn Gly Val Cys Lys Trp Pro Gly Cys Glu Lys Val Phe
 195 200 205
 Glu Glu Pro Glu Asp Phe Leu Lys His Cys Gln Ala Asp His Leu Leu
 210 215 220
 Asp Glu Lys Gly Arg Ala Gln Cys Leu Leu Gln Arg Glu Met Val Gln
 225 230 235 240
 Ser Leu Glu Gln Leu Val Leu Glu Lys Glu Lys Leu Ser Ala Met
 245 250 255
 Gln Ala His Leu Ala Gly Lys Met Ala Leu Thr Lys Ala Ser Ser Val
 260 265 270
 Ala Ser Ser Asp Lys Gly Ser Cys Cys Ile Val Ala Ala Gly Ser Gln
 275 280 285
 Gly Pro Val Val Pro Ala Trp Ser Gly Pro Arg Glu Ala Pro Asp Ser
 290 295 300
 Leu Phe Ala Val Arg Arg His Leu Trp Gly Ser His Gly Asn Ser Thr
 305 310 315 320
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 325 330 335
 Arg Pro Pro Phe Thr Tyr Ala Thr Leu Ile Arg Trp Ala Ile Leu Glu
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 Ala Pro Glu Lys Gln Arg Thr Leu Asn Glu Ile Tyr His Trp Phe Thr
 355 360 365
 Arg Met Phe Ala Phe Phe Arg Asn His Pro Ala Thr Trp Lys Asn Ala
 370 375 380
 Ile Arg His Asn Leu Ser Leu His Lys Cys Phe Val Arg Val Glu Ser
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<223> Oligonucleotide for hybridization reaction

<400> 11

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<210> 12

<211> 28

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<223> Oligonucleotide for hybridization reaction

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